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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,152

07/03/2003

Kiyoshi Nitto

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09/10/2004

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EXAMINER

ADDISON, KAREN B

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,152

Applicant(s)

NITTO, KIYOSHI

Examiner

Karen B Addison

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukimoto (6781283).

3. Tsukimoto discloses a vibration type drive unit in fig.1-13 comprising: a Vibration type drive unit comprising: a plate –like elastic body (5); an electromechanical energy conversion element (3) fixed to a side surface of the plate-like elastic body; a column-like elastic body (1) formed on a central portion on a surface of the plate-like elastic body which differs from the surface to which the electromechanical energy conversion element is fixed; and a moving element (fig.9) which is in contact with the surface of the plate –like elastic body. Wherein, an alternating signal is supplied to the electromechanical energy conversion element, a progressive wave is generated on the surface of the plate-like elastic body (5), and the moving element is driven by the progressive wave. Tsukimoto also disclose, the elastic body having a shape such that the column-like elastic body protrudes (1) in a direction perpendicular to the surface to which the electromechanical energy conversion element is fixed. Tsukimoto further disclose a supporting member (6) fixing the plate-like elastic body and the column-like elastic body, wherein, the moving element rotates and moves about the supporting member.

4. Claims 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukimoto(5886455).

In regards to claim 4-5

Tsukimoto discloses in fig.1-25 a vibrator type drive unit comprising: a vibrator (41) made of an elastic body which an electromechanical energy conversion element (42) is fixed; wherein, the vibrator is in contact with the moving element (53) by a surface of the vibrator element which is position in the side opposite of the surface to which the electromechanical energy conversion element is fixed, an part of the vibrator opposes an inner diameter portion of the moving element (53) and when alternating signal is supplied to the electromechanically energy conversion element, a progressive wave is generated on the surface of the plate-like elastic body so that the moving element is driven by the progressive wave. Wherein, the supporting member (10a) fixing a member constructing vibrator and the moving element rotates about the supporting member.

In regards to claim 6-9

Tsukimoto discloses in fig.1-25 a vibrator type drive unit comprising: a vibrator made of an elastic body (41) which an electromechanical energy conversion (42) element is fixed; and a moving element (53) which is in contact with a surface of the vibrator, wherein an alternatnating signal is supplied to the eletromechanical energy conversion element, the vibrator generate a plurality of bending vibration vibrations (fig.7a, 7b) which are displaced in a direction approximately perpendicular to a predetermine surface of the electromechanical energy conversion element and a plurality of bending

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vibrations which are displaced in a direction approximately parallel to the predetermine surface , and the moving element(53) is driven by a progressive wave generated by synthesis of the plurality of bending vibration that are displaced in the approximately perpendicular direction. Wherein, the degrees of the plural bending vibration (7a 7b) which are displaced in the direction approximately perpendicular to the predetermine surface of the electromechanical energy conversion element are the same mutually, and the degrees of the plural bending vibrations which are displaced in the direction approximately parallel to the predetermined surface are the same mutually. Tsukimoto also discloses, the eletromechanical energy conversion having different degrees (17b) of the plural bending vibrations which are displaced in the direction approximately parallel to the predetermine direction. Wherein, the device further comprises a supporting member fixing member (45) constructing the vibrator, wherein the moving element rotates (53) and moves about the supporting member (45).

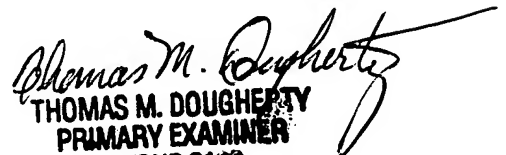
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 571-272-2017. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2204. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBA
8/3/04


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